

PC BUILDER

Remote-control a Media Center PC

If you keep missing programmes on TV because you forgot to set them to record in Media Center, you can set up your EPG so you can control it from the internet, as Jim Martin explains

If you've built, or bought, a Media Center PC and managed to iron out the inevitable teething problems, you'll be feeling rather pleased. A smooth-running Media Center is a powerful and flexible entertainment system, capable of showing off your photos in style, allowing instant access to your whole music collection, scheduling TV recordings and letting you pause and rewind live TV.

Media Center's electronic programme guide (EPG) is one of the best around, eclipsing most Freeview and satellite receivers for ease of use and power. It even allows you to search for programmes by keyword; use the remote to key in 'David Jason', for example, and the guide will list every show he appears in for the next two weeks or so. Then simply highlight the show you want to record and press the record button to schedule it. Press it twice, and the whole series is recorded.

However, there will be times when you forget to schedule recordings, which is where Media Center falls down. Despite being a PC with an internet connection, Microsoft didn't see fit to include any way to remote-program it over the web. Fortunately, there is a third-party alternative: WebGuide 4. This simple yet ingenious tool is free, and you can download it from <http://asciiexpress.com/webguide>.

WebGuide4 lets you view your EPG in a web browser, and it looks almost identical to the real thing. You can scroll left and right on the timeline as well as up and down to search through all the channels to find the show you want or you can search by the show's name, date or time. You click on a show to record it. WebGuide4 also lets you view recently recorded TV as well as upcoming recordings.

WHAT YOU NEED

To make your Media Center accessible on the internet, you'll need to connect it to a wired or wireless router and have a broadband connection. You'll also need a fixed IP address or support for a Dynamic DNS service in your router. Your PC will need a network card that supports Wake-on-LAN (WOL). Even if it does, you'll need to ensure this feature is enabled in the BIOS. Usually, this setting is found in the Power Management section and is called Wake-on-LAN, Wake on Ring, Net Boot or similar.

One other problem we've found with Media Center is that it won't reliably go into Sleep mode after recording a show. A simple solution to this is MCEStandby, which can be downloaded from www.spinrock.net/files/MCEStandbySetup12.zip. This plug-in monitors processor usage and forces the computer to enter Standby mode when the usage drops below a set threshold for a set period of time.

GET CONNECTED

1 Download the WebGuide4 (the latest version is 4.0.13) package for your operating system; Windows Media Center 2005 and Windows Vista are both supported. Double-click the downloaded file to install the application.

There are several settings to configure. First, you must decide how many channels you want to be able to view, and how many programmes to show on the homepage. We found 100 Guide Rows and six Home Rows worked well. Tick the box to colour-code the EPG by genre so it's easy to find what you're looking for.

2 Click on the Users tab to create WebGuide users. Set up an account for yourself, allowing you full access to admin settings and deleting recordings. Restrict other users to only scheduling recordings or watching recorded TV. At least one user account needs to be set up before you can use WebGuide to access your PC.

3 Most ISPs assign you an IP address dynamically every time you connect, which makes it hard to find your Media Center remotely. The solution is a Dynamic DNS account. Go to www.dyndns.com and register for a free account. Follow the email instructions to log in. Click on My Services, Add Host Services and click Add Dynamic DNS Host. Enter the host name you want to call your Media Center, such as 'jim'. Select the domain name from the drop-down list, such as 'is-a-geek.com', and click Add Host. Your Media Center will now be accessible as hostname.domainname – jim.is-a-geek.com in our example.

Next, you need to keep this domain updated with your home network's IP address. The easiest way to do this is if your router has dyndns.org support built in. If it does, just configure your router with your username, password and hostname. If your router doesn't have this support, go to www.dyndns.org/support/clients and download DynDNS Updater to your Media Center. Install it, fill in your dyndns.org username, password and host details, and Media Center will keep your home network's IP address up to date.

4 Your Media Center's IP address can change, too, so it's best to set an IP address manually. To work out which address to give it, connect to your router's management page. Find the DHCP server settings. Depending on your router, it will either have a start and end address listed (for example, 192.168.2.2 and 192.168.2.51), or a start address and the number of addresses to give out (for example, 192.168.2.2 and 50). The second example means exactly the same thing as the first.

Just pick an IP address that falls outside this automatic range. Keep the first three numbers of the IP address the same as your router gives out, but change the last number. In our example above, 192.168.2.100 would be fine. However, the last number can only go as high as 254. If your router is set to assign this IP address, pick an IP address lower than the DHCP start address.

To configure your PC, right-click on My Network Places and select Properties. Right-click on the network connection your Media Center uses to connect to the internet; often called Local Area Connection. Double-click the Internet Protocol (TCP/IP) list entry and you'll

FAQ

Q Can you watch TV remotely using MCE?

A Yes. Using the latest version of WebGuide you can watch live TV in a web browser. This isn't a free feature, though, and you'll need to unlock it by buying a code for \$15 (around £8). However, you'll also gain many more features that make it worth the price. You can pause live TV in a web browser as well as watch what Media Center is already playing. You can also access your entire media library remotely. That means you can view your photos, listen to your music collection and watch videos. In addition, you can watch recorded TV shows via networked PCs on your home network using Windows Media Player.

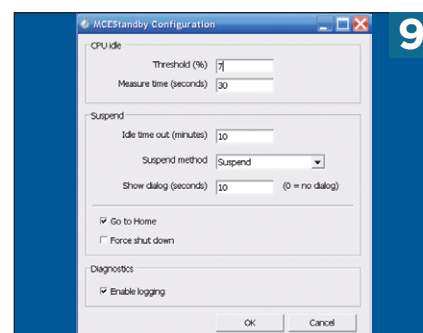
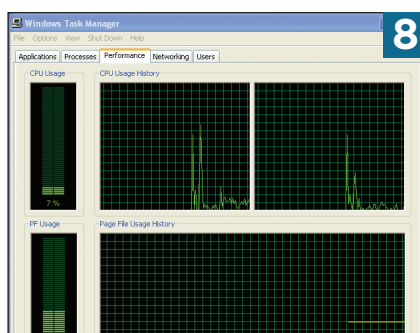
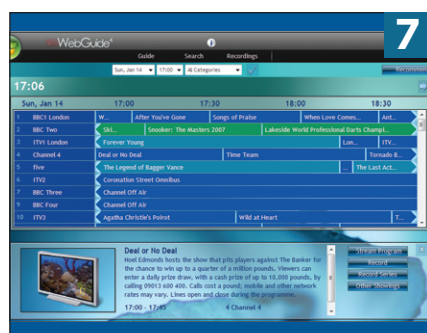
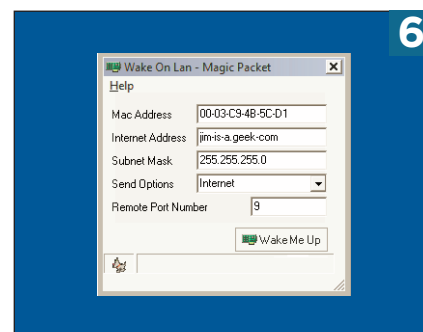
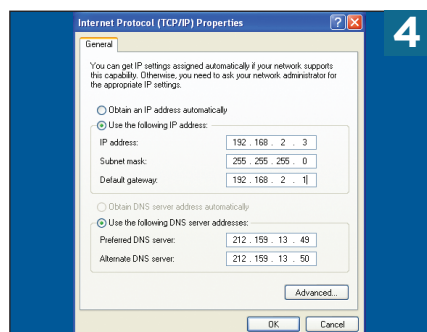
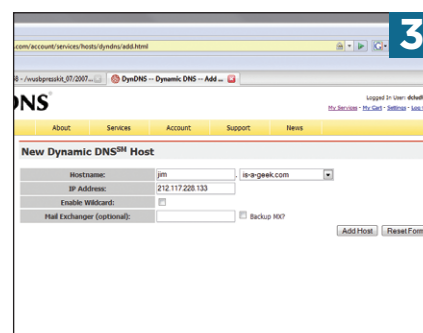
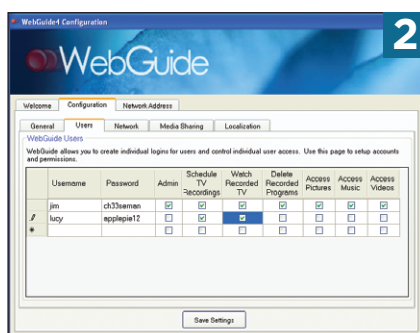
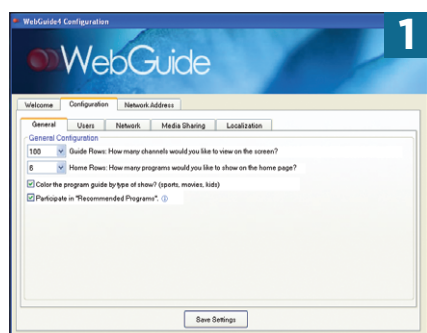
The final bonus is that you can access the EPG on a Pocket PC or Windows-based smartphone. Alternatively, a device such as Sling Media's Slingbox or Sony's Location Free will let you stream video over the internet.

Jim Martin

Technology correspondent

jim_martin@dennis.co.uk





see a window where Obtain an IP address automatically is selected. Click the 'Use the following IP address' radio button. Enter the IP address you decided on earlier, enter the subnet mask as 255.255.255.0 and enter the Default gateway address as your router's IP address. Enter the DNS server address as your router's IP address and click on OK.

5 To ensure WebGuide can talk to your Media Center, you'll need to forward web requests from your router to the Media Center PC. WebGuide4 can attempt to do this automatically if you have a UPnP router, but if it fails you can read your router's manual to find out how to forward the port manually to the PC's IP address. To create a new rule give it a name, type the IP address of your Media Center (as set in Step 4) and choose to open port 80 for TCP connections. If you also have to enter source and destination ports, enter them as port 80. For more information see www.portforward.com.

6 If your Media Center is in Sleep mode, it won't respond to incoming requests from the internet. Fortunately, if your PC supports WOL, as described in the introduction, you can send a wake-up signal to it.

First, click on Start, Run, type CMD and press Return. Type `ipconfig /all` and make a note of your PC's MAC address (it looks like this: 00-03-C9-4B-5C-D1). Next, access your router's management page and go to the port forwarding option, as in Step 5. Forward incoming UDP requests on port 9 to the broadcast address for

your network. This special address is the same as your router's IP address, but the last number is 255 (192.168.2.255 in our example). Download the Wake on LAN for Windows application from www.depicus.com/wake-on-lan/wake-on-lan-gui.aspx and make sure you've got a copy of it on the PC that you want to use to control your Media Center.

Run the application and type in the MAC address you noted down, enter the Internet Address as the Dynamic DNS hostname you registered, the Subnet mask as 255.255.255.0 and the Port as 9. Click Wake Me Up and your PC should wake up. If your router or Media Center don't support Wake-on-LAN, you'll have to leave your PC turned on to use the WebGuide, so skip the last two steps.

7 Once you've used the wakeup tool, you can simply wait a few seconds for the PC to resume from Sleep mode and direct your browser at your Dynamic DNS hostname, remembering to add `www.` to the front of the address and `/webguide` at the end. For our example, `www.jim-is-a-geek.com/webguide` would work. You should see a username and password prompt appear; enter your details and you'll be taken to the homepage. From here, you can click the Guide button and you'll see the programmes at the current time.

You can easily skip to a particular day, time and category of programme by using the drop-down menus at the top of the screen. Click on a show and a summary will appear at the bottom along with Record and Record series options.

FORCE SHUTDOWN

8 Determining the correct processor threshold for your system when it's idle is necessary, so you can tell Media Center to shut down when it's not busy recording or playing a TV programme. To measure your system's processor utilisation, start a recording on one channel only. Close the MCE interface and open Task Manager by pressing Ctrl-Shift-Esc. Watch the CPU Usage meter for a couple of minutes and note the minimum value.

9 Extract the .msi file from the MCEStandby plug-in Zip file you downloaded, right-click on it and choose Install from the list. Run the configuration tool, which is a short cut placed on the Desktop. Set the Threshold to be one per cent less than the minimum value you noted down in Step 8. Set the Idle time-out (minutes) to 10. This is the amount of time before MCEStandby will force a shutdown after the processor load falls below the threshold you set. You can show an Abort Shutdown dialog for a set period if you like; set the period to zero if you don't want this to appear.

If you find your Media Center is failing to shut down automatically, try raising the threshold by one or two per cent. **ES**

Next month

BUILD A GREEN PC

How to use low-power Mini-ITX parts to make an energy-efficient computer